

COMMONWEALTH OF AUSTRALIA

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Family Name	
Given Names	
Student Number	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
Teaching Period	Summer Semester, 2016

FINAL EXAMINATION	DURATION				
ACT502 – Management Accounting	<table> <tr> <td>Reading Time:</td><td>10 minutes</td></tr> <tr> <td>Writing Time:</td><td>180 minutes</td></tr> </table>	Reading Time:	10 minutes	Writing Time:	180 minutes
Reading Time:	10 minutes				
Writing Time:	180 minutes				

INSTRUCTIONS TO CANDIDATES

Complete both Parts A and B

EXAM CONDITIONS

You may begin writing from the commencement of the examination session. The reading time indicated above is provided as a guide only.

This is a RESTRICTED OPEN BOOK examination

Any non-programmable calculator is permitted

No handwritten notes are permitted

Hard copy, unannotated English translation dictionary only

ADDITIONAL AUTHORISED MATERIALS	EXAMINATION MATERIALS TO BE SUPPLIED
No additional printed material is permitted	1 x 16 Page Book 1 x 4-Multiple Choice Answer Sheet 1 x Scrap Paper

**THIS EXAMINATION IS PRINTED
DOUBLE-SIDED.**

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LEFT BLANK.**

Part A: Multiple choice questions – answer these in the sheet provided.

*There are **20 questions** and the marks are shown for each of these. There are **52 marks** in total*

Please choose the answer that most applies and answer in the answer sheet provided

Part B: Practical Questions - All of the following questions must be answered

Answer these questions in the exam booklet provided. There are 48 marks for this section.

Question 1 - 12 marks

Darwin Company is considering a capital investment of \$145,000 in new equipment. The equipment is expected to have a useful life of 10 years with no salvage value. Depreciation is computed by the straight-line method. During the life of the investment, annual net income and cash inflows are expected to be \$11,000 and \$25,500, respectively. Easton requires either a 10% cost of capital "hurdle" rate, or a payback period of 7 years.

Compute the following:

- (a) cash payback period (3 marks)
- (b) net present value (3 marks)
- (c) internal rate of return (to the nearest percent) (3 marks)
- (d) annual rate of return (3 marks)

Show all computations. State whether the project should be accepted or rejected for each of the four capital budgeting techniques.

Question 2 - 8 marks

Choco Nibbles produces low calorie chocolate snacks. The Baking Department has the following production and manufacturing cost data for January.

Production: Beginning inventory has 2,200 boxes of Nibbles that are 100% complete as to materials and 30% complete as to conversion costs. A total of 38,000 boxes were started into production. Ending inventory of 3,500 boxes are 40% complete as to conversion costs.

Manufacturing Costs: Beginning work in process inventory was \$7,845, comprised of \$3,160 of materials and \$4,685 of conversion costs. Materials added during the month were \$29,000, with labor and overhead applied during the month totalling \$19,000 and \$16,320, respectively.

Instructions

- (a) Compute the equivalent units of production for materials and conversion costs for the month of January. (4.5 Marks)
- (b) Compute the unit costs for materials and conversion costs. (1.5 Marks)
- (c) Determine the costs to be assigned to the units transferred out and ending work in process. (2 Marks)

Question 3 - 16 marks

HIR produces two products: hand soap and sanitizer. During June, 8,000 containers of hand soap and 6,000 containers of sanitizer were produced. Total overhead costs of \$34,000 were incurred. The following information related to overhead costs was available:

<u>Activity</u>	<u>Cost Driver</u>	<u>Total Cost</u>
Materials handling	Number of requisitions	\$7,000
Machine setups	Number of setups	12,000
Quality inspections	Number of inspections	15,000

The cost driver volume for each product was as follows:

<u>Cost Driver</u>	<u>Hand soap</u>	<u>Sanitizer</u>	<u>Total</u>
Number of requisitions	25	15	40
Number of setups	12	13	25
Number of inspections	90	160	250

Instructions

- (a) Compute the overhead rate for each activity. (3 Marks)
- (b) Assign the manufacturing overhead costs for June to the two products using activity-based costing, and determine the overhead cost per unit. (13 Marks)

Question 4 - 12 marks

Temp Range Company prepared the following income statement for 2016:

TEMP RANGE COMPANY
Income Statement
For the Year Ended December 31, 2016

Sales (5,000 units)	\$200,000
Variable expenses.....	<u>75,000</u>
Contribution margin.....	125,000
Fixed expenses	<u>83,200</u>
Net income.....	<u>\$ 41,800</u>

Instructions

Answer the following independent questions and show computations to support your answers.

1. What is the company's break-even point in units? (4 Marks)
2. How many units would the company have had to sell to earn a target net income of \$64,000 in 2016? (2 Marks)
3. If the company expects a 25% increase in sales volume in 2017, what would be the expected net income in 2017? (2 Marks)
4. How much sales (in dollars) would the company have to generate in order to earn a target net income of \$68,000 in 2017? (4 Marks)

*****End of Exam*****

TABLE 4 Present Value of an Annuity of 1

(n) Payments	4%	5%	6%	7%	8%	9%	10%	11%	12%	15%
1	.96154	.95238	.94340	.93458	.92593	.91743	.90909	.90090	.89286	.86957
2	1.88609	1.85941	1.83339	1.80802	1.78326	1.75911	1.73554	1.71252	1.69005	1.62571
3	2.77509	2.72325	2.67301	2.62432	2.57710	2.53130	2.48685	2.44371	2.40183	2.28323
4	3.62990	3.54595	3.46511	3.38721	3.31213	3.23972	3.16986	3.10245	3.03735	2.85498
5	4.45182	4.32948	4.21236	4.10020	3.99271	3.88965	3.79079	3.69590	3.60478	3.35216
6	5.24214	5.07569	4.91732	4.76654	4.62288	4.48592	4.35526	4.23054	4.11141	3.78448
7	6.00205	5.78637	5.58238	5.38929	5.20637	5.03295	4.86842	4.71220	4.56376	4.16042
8	6.73274	6.46321	6.20979	5.97130	5.74664	5.53482	5.33493	5.14612	4.96764	4.48732
9	7.43533	7.10782	6.80169	6.51523	6.24689	5.99525	5.75902	5.53705	5.32825	4.77158
10	8.11090	7.72173	7.36009	7.02358	6.71008	6.41766	6.14457	5.88923	5.65022	5.01877
11	8.76048	8.30641	7.88687	7.49867	7.13896	6.80519	6.49506	6.20652	5.93770	5.23371
12	9.38507	8.86325	8.38384	7.94269	7.53608	7.16073	6.81369	6.49236	6.19437	5.42062
13	9.98565	9.39357	8.85268	8.35765	7.90378	7.48690	7.10336	6.74987	6.42355	5.58315
14	10.56312	9.89864	9.29498	8.74547	8.24424	7.78615	7.36669	6.98187	6.62817	5.72448
15	11.11839	10.37966	9.71225	9.10791	8.55948	8.06069	7.60608	7.19087	6.81086	5.84737
16	11.65230	10.83777	10.10590	9.44665	8.85137	8.31256	7.82371	7.37916	6.97399	5.95424
17	12.16567	11.27407	10.47726	9.76322	9.12164	8.54363	8.02155	7.54879	7.11963	6.04716
18	12.65930	11.68959	10.82760	10.05909	9.37189	8.75563	8.20141	7.70162	7.24967	6.12797
19	13.13394	12.08532	11.15812	10.33560	9.60360	8.95012	8.36492	7.83929	7.36578	6.19823
20	13.59033	12.46221	11.46992	10.59401	9.81815	9.12855	8.51356	7.96333	7.46944	6.25933

TABLE 3 Present Value of 1

(n) Periods	4%	5%	6%	7%	8%	9%	10%	11%	12%	15%
1	.96154	.95238	.94340	.93458	.92593	.91743	.90909	.90090	.89286	.86957
2	.92456	.90703	.89000	.87344	.85734	.84168	.82645	.81162	.79719	.75614
3	.88900	.86384	.83962	.81630	.79383	.77218	.75132	.73119	.71178	.65752
4	.85480	.82270	.79209	.76290	.73503	.70843	.68301	.65873	.63552	.57175
5	.82193	.78353	.74726	.71299	.68058	.64993	.62092	.59345	.56743	.49718
6	.79031	.74622	.70496	.66634	.63017	.59627	.56447	.53464	.50663	.43233
7	.75992	.71068	.66506	.62275	.58349	.54703	.51316	.48166	.45235	.37594
8	.73069	.67684	.62741	.58201	.54027	.50187	.46651	.43393	.40388	.32690
9	.70259	.64461	.59190	.54393	.50025	.46043	.42410	.39092	.36061	.28426
10	.67556	.61391	.55839	.50835	.46319	.42241	.38554	.35218	.32197	.24719
11	.64958	.58468	.52679	.47509	.42888	.38753	.35049	.31728	.28748	.21494
12	.62460	.55684	.49697	.44401	.39711	.35554	.31863	.28584	.25668	.18691
13	.60057	.53032	.46884	.41496	.36770	.32618	.28966	.25751	.22917	.16253
14	.57748	.50507	.44230	.38782	.34046	.29925	.26333	.23199	.20462	.14133
15	.55526	.48102	.41727	.36245	.31524	.27454	.23939	.20900	.18270	.12289
16	.53391	.45811	.39365	.33873	.29189	.25187	.21763	.18829	.16312	.10687
17	.51337	.43630	.37136	.31657	.27027	.23107	.19785	.16963	.14564	.09293
18	.49363	.41552	.35034	.29586	.25025	.21199	.17986	.15282	.13004	.08081
19	.47464	.39573	.33051	.27615	.23171	.19449	.16351	.13768	.11611	.07027
20	.45639	.37689	.31180	.25842	.21455	.17843	.14864	.12403	.10367	.06110